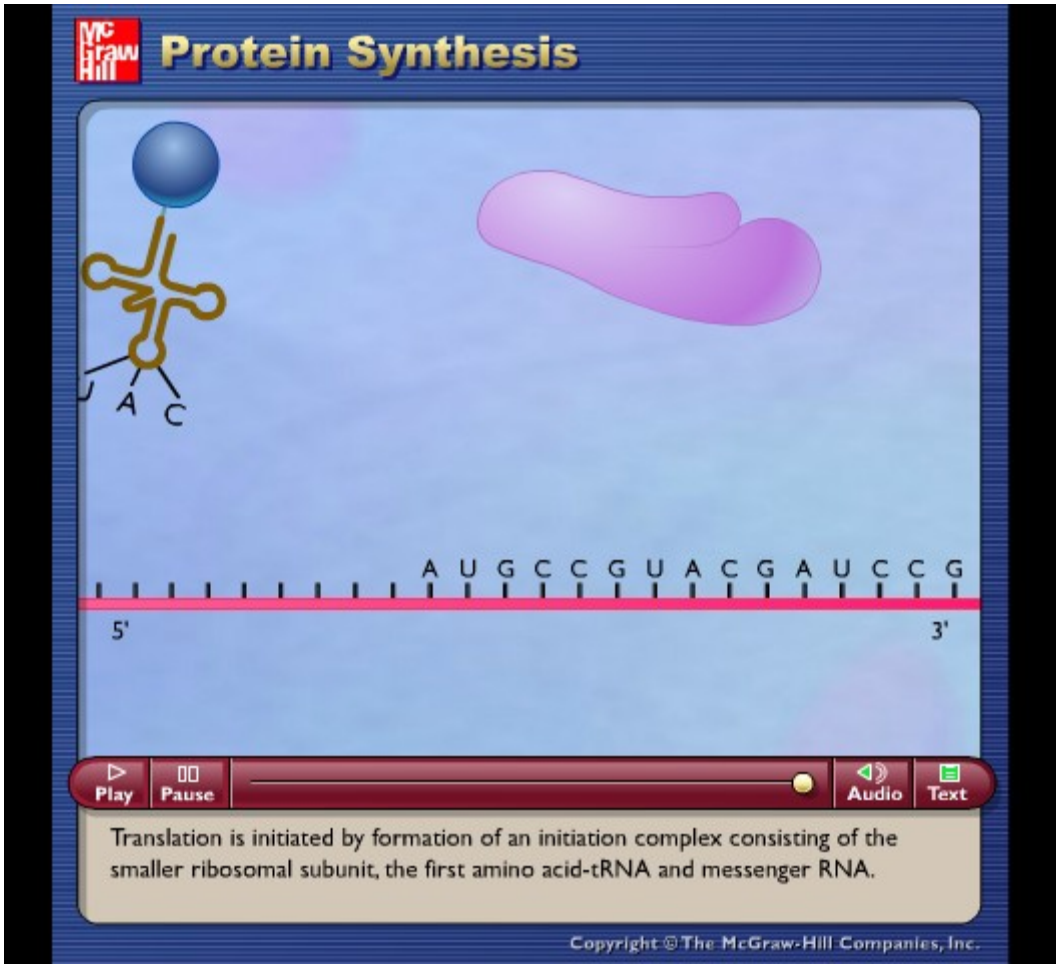
Animation: Protein Synthesis


Protein Synthesis
U A C
A U G C C G U A C G A U C C G
5'
3'
Play
Pause
Audio
Text
Translation is initiated by formation of an initiation complex consisting of the smaller ribosomal subunit, the first amino acid-tRNA and messenger RNA.
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4.7: Changes in Genetic Information

- **Only about 1/10th of one percent of the human genome differs from person to person**

Nature of Mutations

- **Mutations – change in genetic information**
- **Result when:**
  - **Extra bases are added or deleted**
  - **Bases are changed**
- **May or may not change the protein**

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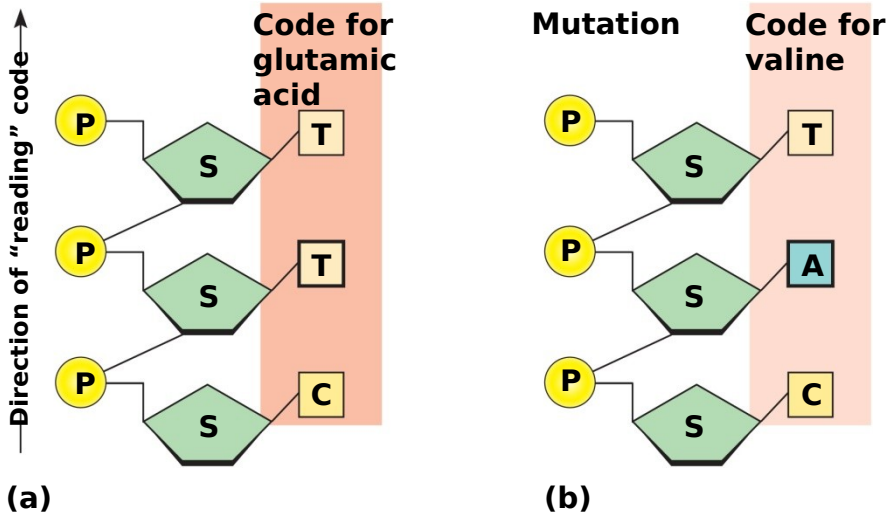

Protection Against Mutation

- **Repair enzymes correct the mutations**

Inborn Errors of Metabolism

- **Occurs from inheriting a mutation that then alters an enzyme**
- **This creates a block in an otherwise normal biochemical pathway**